UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 (6SF-AP)
1445 ROSS AVENUE, SUITE 1200
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December 9, 2014

TECHNICAL MEMORANDUM

SUBJECT: *Documentation of minor change to Malone Service Company Superfund Site, Texas City, Texas, Record of Decision*

FROM: Carlos A. Sanchez
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Region 6, Superfund Division (6SF-RA)

Carlos A. Sanchez 12/18/14

TO: Malone Service Company Superfund Site Administrative Record File

Site Name, Location, and Lead and Support Agency

Site Name: Malone Service Company, (Swan Lake)
Site Location: Texas City, Galveston County, Texas
CERCLA ID No.: TXD980864789
Support Agency: Texas Commission on Environmental Quality (TCEQ)
Lead Agency: U.S. Environmental Protection Agency (EPA), Region 6

Introduction:

This memorandum documents a minor change to the Malone Service Company Superfund Site September 30, 2009 Record of Decision (ROD). This memorandum changes the 2009 ROD Unconfined Compressive Strength (UCS) requirement of greater than 25 pound-force per square inch (psi) for all solidified material, and replaces it with a minimum UCS of 15 psi, while retaining the ROD requirement for no free liquids expressed during the UCS testing, within 28 days. A change in the UCS is a functional specification of the remedial action; the remedial objectives, the preference for treatment, and ARARs are being met; therefore, the change in UCS is considered a minor change.

The 2009 ROD requires the Site source material (e.g, sludge) to be solidified and to be placed in a Resource Conservation and Recovery Act (RCRA) Subtitle "C" equivalent cell. For placement in a RCRA Subtitle C equivalent disposal cell, EPA determined that the treated/solidified material should have a UCS greater than 25 psi. The ROD requirement of greater than 25 psi UCS was based on the EPA Office of Research and Development recommendation prior to development of the ROD; the 25 psi UCS standard was later incorporated in the ROD without consideration of a lower UCS, or of a lower UCS based or reuse as a preserve/conservancy (as documented in the ROD). However, following the ROD effective date, the Phase-1 Remedial

Action (RA) solidification pilot test indicated that all sludge can be successfully solidified to a minimum UCS of 15 psi while exhibiting no free liquids during testing.

The Phase-1 Remedial Design (RD) Work Plan (ENTACT - May 2013) presents UCS calculations to support a UCS of 15 psi. The performance goal for the full-scale solidification pilot study performed during the Phase-1 RA was to confirm a reagent mixture capable of creating a solidified material with a minimum UCS of 15 psi while expressing no free liquids in the solidified sludge within 28 days of curing. The Phase-1 RA full-scale solidification pilot study confirmed and demonstrated that the required strength and absence of free moisture in the solidified material requirements can be met in the field utilizing the same equipment and techniques anticipated for use during the remedial action.

Considering that 1) the minor change is consistent with the UCS goals as defined in the ROD: 2) engineering calculations (ENTACT, 2013, Phase-1 RD Work Plan, Appendix A) and full-scale solidification pilot testing during Phase-1 RA field activities indicate that the 15 psi UCS will support the cell cap and any equipment needed to maintain the cell (e.g., mowing, bulldozers for erosion control, etc.); 3) the Site future use will be as a preserve or conservancy; 4) the cell footprint will be less than the 25 psi requirement, leaving more property available for reuse; and 5) the change will maintain remedy integrity and protection, the change in UCS from greater than 25 psi to a minimum of 15 psi is justified. The responsible parties are responsible for the integrity of the RCRA Subtitle C equivalent cell throughout the life of the cell.

After consideration of the cell construction requirements and the potential for additional property available for reuse, EPA Region 6, has determined that a change in the solidification UCS requirement is appropriate. Although the minor change modifies a component of the approved remedy, the EPA believes that the remedy remains protective of human health and the environment. EPA has determined that the change in UCS provided in this Memorandum to File is not significant and does not fundamentally alter the overall remedy for the Site with respect to scope, performance, and is cost effective. The Environmental Protection Agency, Region 6, received comments from the Texas Commission on Environmental Quality (TCEQ) on the change in UCS.